Owner's Manual

MOON

i.5

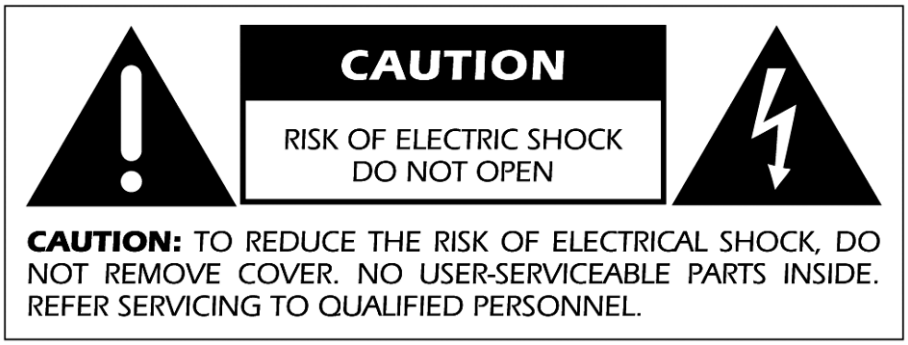
Integrated Amplifier

M O O N

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or another apparatus that produces heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for safety. If the provided plug does not fit into the outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments and accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power cord or plug has been damaged; liquid has been spilled or objects have fallen into the apparatus; or the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. No naked flame sources, such as candles, should be placed on the apparatus.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

Important Safety Instructions (cont'd)

The lightning flash with the arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Marking by the "CE" symbol (shown left) indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community

Please read all instructions and precautions carefully and completely before operating your Simaudio MOON i.5 Integrated Amplifier.

1. **ALWAYS** disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component.
2. The MOON i.5 must be terminated with a three-conductor AC mains power cord which includes an earth ground connection. To prevent shock hazard, all three connections must **ALWAYS** be used. Connect the MOON i.5 only to an AC source of the proper voltage; Both the shipping box and rear panel serial number label will indicate the correct voltage. Use of any other voltage will likely damage the unit and void the warranty
3. AC extension cords are **NOT** recommended for use with this product.
4. **NEVER** use flammable or combustible chemicals for cleaning audio components.
5. **NEVER** operate the MOON i.5 with any covers removed. There are no user-serviceable parts inside. An open unit, especially if it is still connected to an AC source, presents a potentially lethal shock hazard. Refer all questions to authorized service personnel only.
6. **NEVER** wet the inside of the MOON i.5 with any liquid. If a liquid substance does enter your MOON i.5, immediately disconnect it from the AC mains and take it to your MOON dealer for a complete check-up.
7. **NEVER** spill or pour liquids directly onto the MOON i.5.
8. **NEVER** block air flow through ventilation slots or heatsinks.
9. **NEVER** bypass any fuse.
10. **NEVER** replace any fuse with a value or type other than those specified
11. **NEVER** attempt to repair the MOON i.5. If a problem occurs contact your MOON dealer.
12. **NEVER** expose the MOON i.5 to extremely high or low temperatures.
13. **NEVER** operate the MOON i.5 in an explosive atmosphere.
14. **ALWAYS** keep electrical equipment out of reach of children.
15. **ALWAYS** unplug sensitive electronic equipment during lightning storms.

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Revision no.: 20101001

Congratulations!

Thank you for selecting the **MOON i.5** Integrated Amplifier as a part of your music/cinema system. This component has been designed to offer state-of-the-art high-end performance in an elegant package, while retaining all the sonic hallmarks on which Simaudio has made its reputation. We have spared no effort to ensure that it is amongst ***the finest*** two-channel Integrated Amplifiers available in its class. We have been building high-performance audio equipment for over 25 years, and the know-how gained through our cumulative experience is an important reason why **MOON** integrated amplifiers are so musically satisfying.

The performance of your **i.5** will continue to improve during the first 400 hours of listening. This is the result of a "break-in" period required for the numerous high quality electronic parts used throughout this integrated amplifier.

Before setting up your new **MOON i.5**, we encourage you to please read this manual thoroughly to properly acquaint yourself with its features. We hope you enjoy listening to the **MOON i.5** integrated amplifier as much as the pride we have taken in creating this fine audio product. We understand the power and emotion of music and build our products with the goal of faithfully capturing these elusive qualities.

The information contained in this manual is subject to change without notice. The most current version of this manual is available on our official website at http://www.simaudio.com/manuals.htm

Unpacking

The **MOON i.5** integrated amplifier should be removed from its box with care.

The following accessories should be included inside the box with your integrated amplifier:

- ✓ *AC power cable*
- ✓ *'CRM-2' remote control with two 'AA' batteries (USA and Canada only)*
- ✓ *This owner's manual*
- ✓ *Warranty and product registration information (USA and Canada only)*

As soon as the integrated amplifier is safely removed from its box and placed down, perform a thorough physical inspection and report any physical damage to your dealer immediately. We suggest that you keep all of the original packaging, storing it in a safe, dry place in the event that you're required to transport the integrated amplifier. The customized packaging is specially designed to protect the **MOON i.5** integrated amplifier from potential damage that may occur during shipping.

Please write the serial number of your new Simaudio **MOON i.5** in the space provided below for future reference.

Serial No.: _____

Introduction

Your **MOON i.5** integrated amplifier incorporates many significant design features to achieve its "world class" level of performance. This is an abbreviated list of the more important features:

An **oversized power supply** using a custom toroidal transformer design

Rated output of **40 watts/channel** into 8 ohms and 80 watts/channel into 4 ohms

Six line-level inputs including one front-mounted 1/8" mini-jack for personal media players

Headphone output on ¼" TRS jack located on the front panel

Remote control operation

A single pair of **bipolar output devices** in the amplification section

Class "A" output to 5 watts for greater efficiency

Circuit board with **pure copper tracings and gold plating** that yields low impedance characteristics

Optimized selection of **very high quality** electronic components

Heat-sink free design incorporating an **all-aluminum chassis** for evenly distributed heat dissipation

Rigid chassis construction to minimize the effects of external vibrations

Designed to be **powered up at all times** for optimal performance

Low operating temperature for a longer than normal life expectancy.

Installation & Placement

The **MOON i.5** requires reasonable ventilation to maintain an optimum and consistent operating temperature. As a result, it should be placed in a location with empty space around it for proper heat dissipation. As well, it should be placed on a solid level surface. You should avoid placing it near a heat source or inside a closed cabinet that is not well ventilated as this could compromise this component's performance and reliability. The **i.5** uses a toroidal transformer; even though it is well shielded, you should not place the integrated amplifier too close to source components sensitive to EMI, such as turntables and phono preamplifiers. *You should never place another component directly on top of this integrated amplifier.*

Front Panel Controls

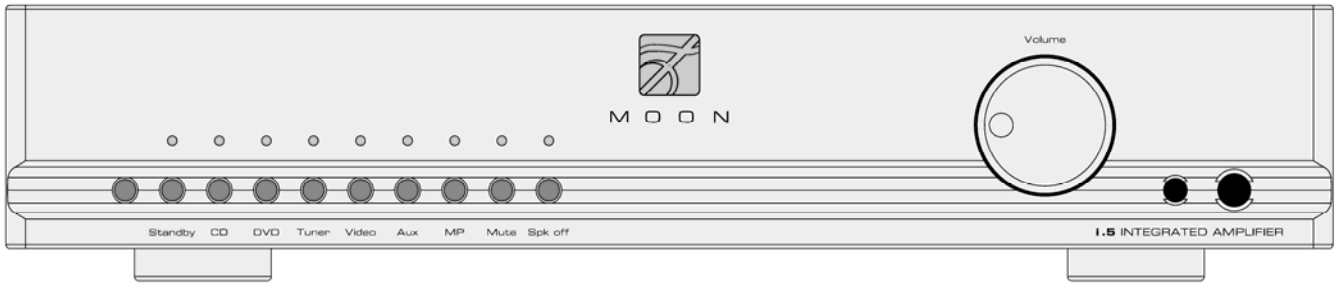

Figure 1: MOON i.5 Front panel

The front panel will look similar to Figure 1 (above). On the lower left side you will find 9 push buttons with an indicator LED directly above each one. The remote control sensor is located directly to the left of the "Standby" button and it should never be blocked or remote control operation may be compromised. The "Standby" button disengages the input section from the rest of the **i.5**'s circuitry. When in "Standby" mode all audio circuitry remains powered up to help maintain optimal performance. When switching back from "Standby" to the "on" mode, both the 'input' and volume level settings will be memorized from the previous listening session. The blue indicator LED does not illuminate when the **i.5** is in "Standby" mode.

The **MOON i.5** integrated amplifier has six (6) inputs labeled CD, DVD, Tuner, Video, Aux, and MP. Each of the first five (5) inputs has a corresponding pair of input connections located on the unit's rear panel (refer to the section entitled "Rear Panel Connections" for futher details). The sixth input, labelled "MP" (Media Player) has its corresponding input connection located on the far right side of the front panel for easy access. As well, the "MP" input, located to the right of the volume control, uses a 1/8" mini-jack connector which is the most common type of connection found on portable media players. Select any one of these six (6) inputs by simply pressing the associated button. When selected, the corresponding red indicator LED, located directly above the button will illuminate.

The "Mute" button mutes the output signal to the loudspeaker terminals, headphone jack and the "PRE OUT" connectors (refer to the section entitled "Rear Panel Connections" for futher details). Pressing the "Mute" button a second time will reinstate the volume back to its previous level. When the output signal is muted, the corresponding red indicator LED, located directly above the "Mute" button, will flash on and off. As well, the LED corrsponding to the selected input will shut off.

The "Spk off" button fully disengages the output signal **only** to the loudspeakers connected to the **MOON i.5**. This feature is very useful when listening to the **i.5** with headphones. As well, the output signal to the "PRE OUT" is unaffected.

The rotary "Volume" control determines the output level. Turning it clockwise increases the volume level and turning it counterclockwise decreases the volume level.

The "Phones" jack is used for connecting a pair of stereo headphones to the **MOON i.5**. The input connector is a standard ¼" stereo TRS jack. When a pair of headphones are used with the **i.5**, the loudspeakers will still receive an output signal. However, you should use the aformentioned "Spk off" button for private listening.

Rear Panel Connections

Figure 2: MOON i.5 Rear panel

The rear panel will look similar to Figure 2 (above). There are five (5) pairs of single-ended inputs on RCA connectors labeled CD, DVD, TUNER. VIDEO and AUX The left channel inputs are located on top and the corresponding right channel inputs are located directly below.

The **MOON i.5** integrated amplifier also has one pair of non-amplified outputs labeled 'PRE OUT', located next to the AUX input, and is designated for output to a power amplifier with single-ended RCA inputs in the event that you wish to use your **MOON i.5** as a preamplifier only. The output level on the 'PRE OUT' is variable and is adjusted by the **i.5**'s volume control.

Directly above the unit's serial number plate, there is a pair of gold-plated binding posts. Connect your loudspeakers, with the cables of your choice, to these binding posts, paying attention to respect the polarity ("+" , "-") of the output.

Finally on the far right side is the main power switch ("0"=off, "1"=on), the IEC receptacle, labeled "AC Input" for the included AC power cord, and the "AC Fuse" socket cover.

You will notice that all RCA input and output connectors on the rear panel have been color coded: 'white' for the left channel and 'red' for the right channel. All rear panel connectors have been chosen because they provide the best possible connections for your unit. A poor contact will degrade the signal substantially, and plugs and sockets should all look clean and free of dirt and corrosion. The easiest way to clean them is to remove the cables from their sockets and push them back in again. This procedure requires that your Integrated Amplifier and the rest of your components be completely turned off. Not heeding this warning may result in serious damage to your equipment. Special contact cleaning fluids and enhancers should not be used, as they deposit a difficult to remove residue which degrades the performance of your components.

Operating the i.5

We recommend that you leave your **MOON i.5** Integrated Amplifier powered up at all times to maintain optimal performance. In the event that you plan to be away from your home for a few days, powering off the Integrated Amplifier may not be a bad idea. Once fully "broken-in", please keep in mind that your **i.5** will require several hours of playing time before it reaches its peak performance after you've powered it up again.

Making the AC Connection

Connect the supplied AC power cable to the IEC receptacle, located on the rear panel of the integrated amplifier's chassis. Ensure that the AC wall outlet you use has a functioning ground. For the best sonic performance, it is preferable that you plug your **MOON i.5** directly into a dedicated AC outlet and avoid using an extension cord. In order to obtain the maximum performance from your audio system, we strongly recommend that the detachable power cord not come into physical contact with any of the interconnect and speaker cables running to and from your **i.5**. In the event that this can't be avoided, you should ensure that any cables coming into contact with each other are crossed at a ninety degree angle to minimize the contact area.

Turning on your MOON i.5 for the first time

Prior to turning the integrated amplifier on for the first time, make sure that every cable is properly connected to avoid any problems. Then turn on your integrated amplifier in the following manner:

1) Flick the main rocker switch labeled "POWER" to the '1' (on) position on the rear of the **i.5**.

2) Press the push button labeled "Standby" on the **i.5**s front panel. The blue LED will illuminate.

On and Off Sequence

To avoid having any annoying noises (ie. "thumps" and "pops") emanate from your speakers when powering your **i.5** on or off, you should

1) Always power up your **i.5** integrated amplifier after powering up your source component(s)**.**

2) Always power down your **i.5** before powering down your source component(s)**.**

Remote Control Operation

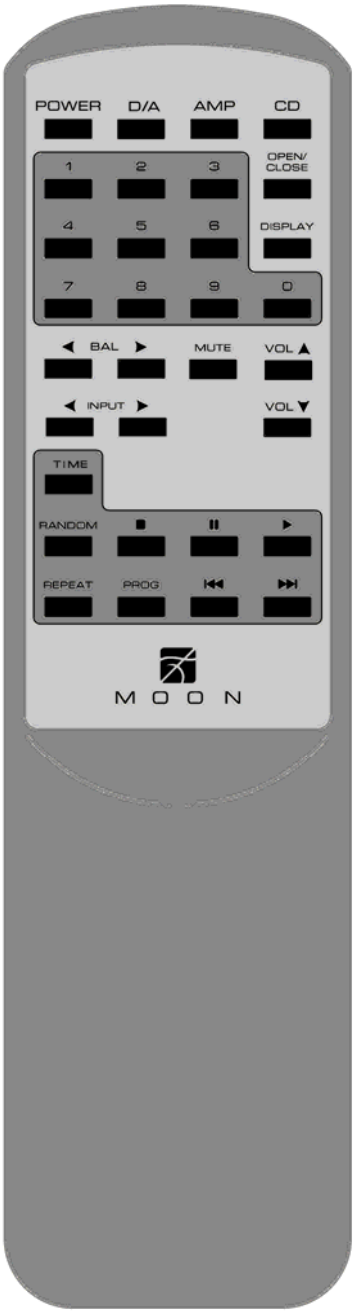

Figure 3: CRM-2 Remote Control

The **MOON i.5** Integrated Amplifier uses the **'CRM-2'** full-function remote control (figure 3). It operates on the Philips RC-5 communication protocol and is can be used with other Simaudio MOON components.

The **'CRM-2'** remote uses two AA batteries (included). To install them, simply slide the back plate off in the direction of the arrow; insert the batteries in the correct direction and then replace the back plate.

To engage the **'CRM-2'** remote for use with the **MOON i.5** Integrated Amplifier, you must first press the button labeled **AMP**.

The **POWER** button located on the upper left will switch the integrated amplifier to either 'Standby' or 'On' mode.

The 2 buttons labelled ◄ **INPUT** ► allow you to sequentially scroll, either backwards or forwards, through all six (6) available inputs. For example, to switch from the "CD" to the "VIDEO" input you may press either ◄ **INPUT** three (3) times or **INPUT** ► three (3) times. Pressing and holding down either of these buttons results in only a single change to the selected input.

The 2 buttons labelled ▼ **VOL** ▲ allow you to control the volume level. Pressing ▼ **VOL** results in a decrease in the volume level; Pressing **VOL** ▲ results in an increase in the volume level. You may either press and hold these buttons down or press them briefly to make volume adjustments.

The **MUTE** button turns off the output volume. Pressing the "Mute" button a second time will reinstate the output volume level back to its current setting.

Specifications

Configuration	Stereo
Class Of Operation - Amplifier	Class A/B
Single-ended inputs	5 (RCA)
Mini-jack input	1 (1/8")
Input Sensitivity	370mV – 3.0V RMS
Input Impedance	11,000Ω
Preamplifier output	1 (RCA)
Headphone output	1 (1/4" Strereo TRS)
Output Power @ 8Ω	40 Watts per channel
Output Power @ 4Ω	80 Watts per channel
Output Impedance	0.04Ω
Damping Factor	> 200
Signal-to-noise Ratio	101dB @ full power
Maximum Output Voltage	20 Volts
Slew Rate	20V/µs
Maximum Current Output	14 amperes
Frequency Response	10Hz - 100kHz +0/-3dB
Crosstalk @ 1kHz	-78dB
Intermodulation Distortion	< 0.07%
THD (20Hz - 20kHz @ 1 watt)	< 0.015%
THD (20Hz - 20kHz @ 40 watts)	< 0.03%
Remote Control	Full-Function (CRM-2)
AC Power Requirements	120V / 60Hz or 240V / 50Hz
Shipping Weight	20 lbs / 8 Kgs
Dimensions (W x H x D, inches)	16.88 x 3.50 x 14.75

Fuse Replacement: For the 120V version use a 4A fast blow (3AG size).
For the 230V version use a 2A fast blow (3AG size).